# Selection Sort



| 3 | 4 | 9 | 2 | 5 | 1 | 8 |
|---|---|---|---|---|---|---|

v[i] = 3

v[min] = 3

v[j] = 4

# Selection Sort
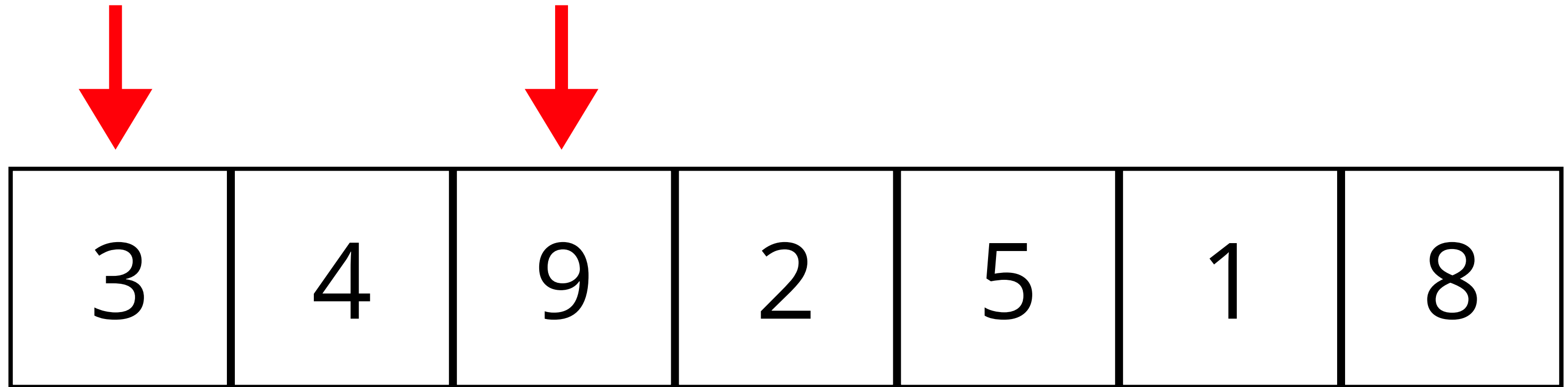
| 3 | 4 | 9 | 2 | 5 | 1 | 8 |
|---|---|---|---|---|---|---|

v[i] = 3

v[min] = 3

v[j] = 9

# Selection Sort
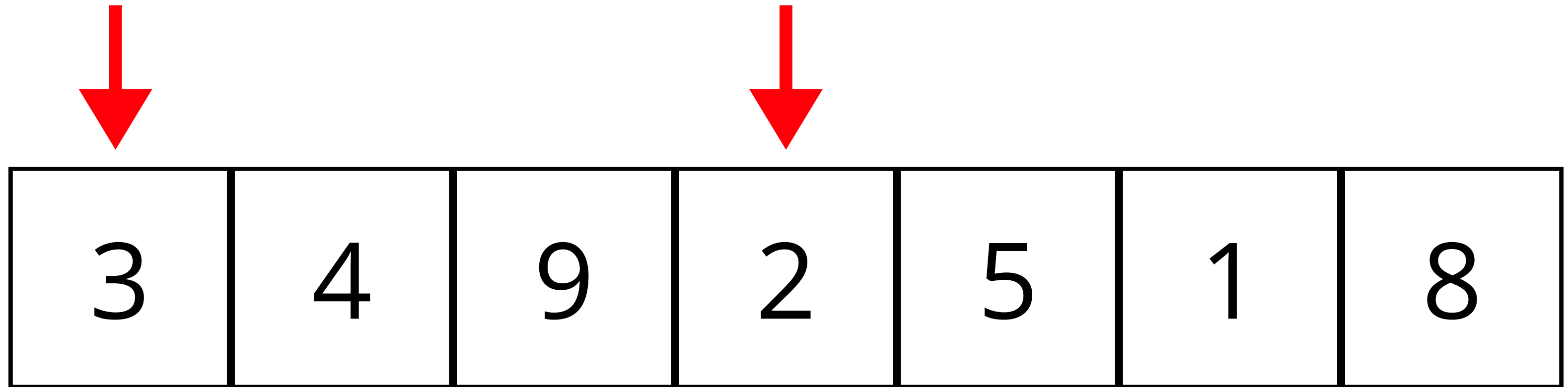
| 3 | 4 | 9 | 2 | 5 | 1 | 8 |
|---|---|---|---|---|---|---|

v[i] = 3

v[min] = 3

v[j] = 2

# Selection Sort

| 3 | 4 | 9 | 2 | 5 | 1 | 8 |
|---|---|---|---|---|---|---|

v[i] = 3

v[min] = 2

v[j] = 2

# Selection Sort



3 | 4 | 9 | 2 | 5 | 1 | 8
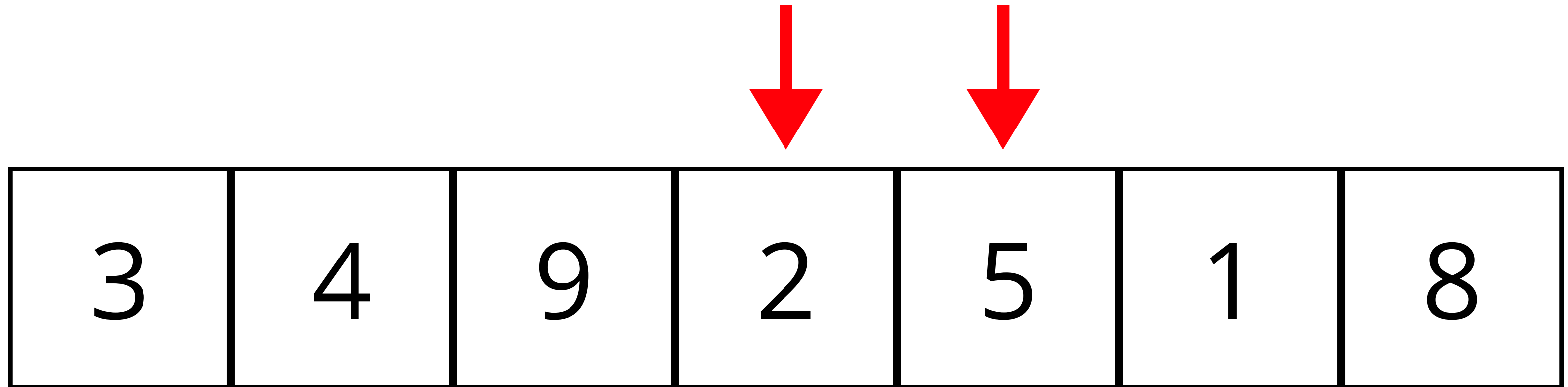
v[i] = 3
v[min] = 2
v[j] = 5

# Selection Sort
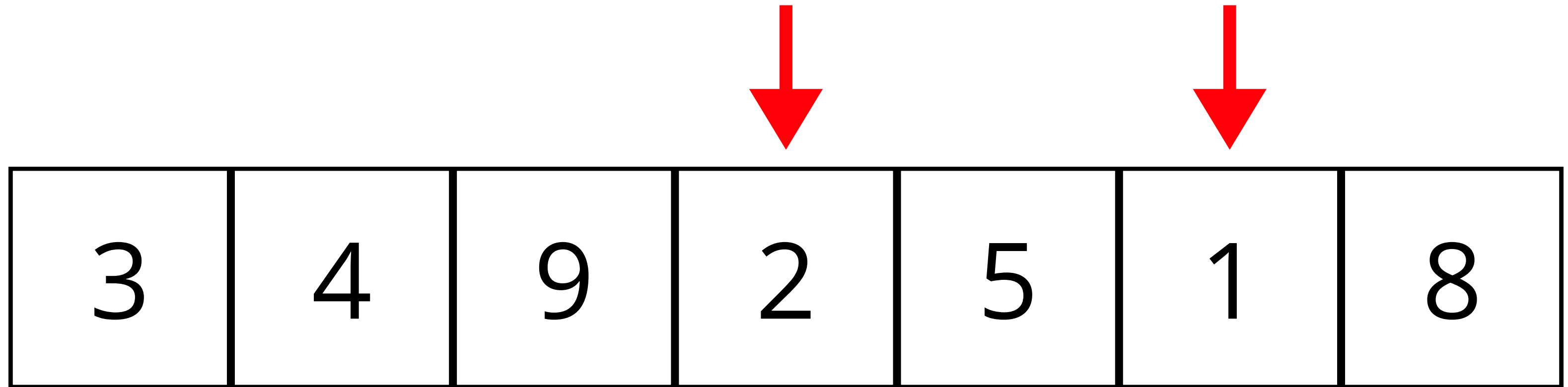


v[i] = 3
v[min] = 2
v[j] = 1

# Selection Sort



| 3 | 4 | 9 | 2 | 5 | 1 | 8 |
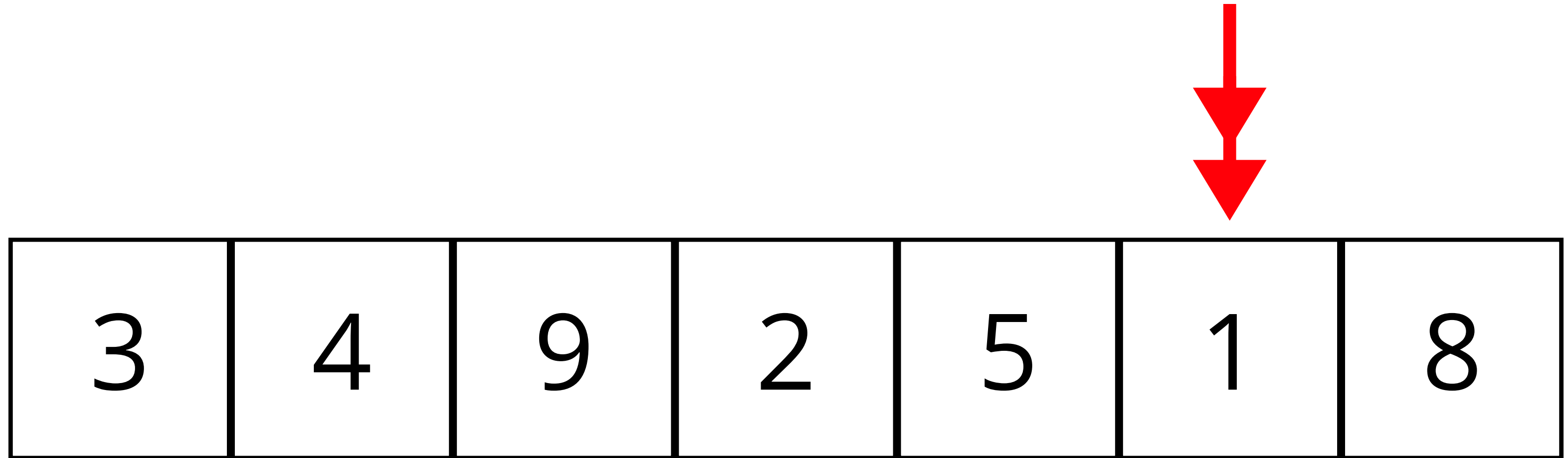
v[i] = 3

v[min] = 1

v[j] = 1

# Selection Sort
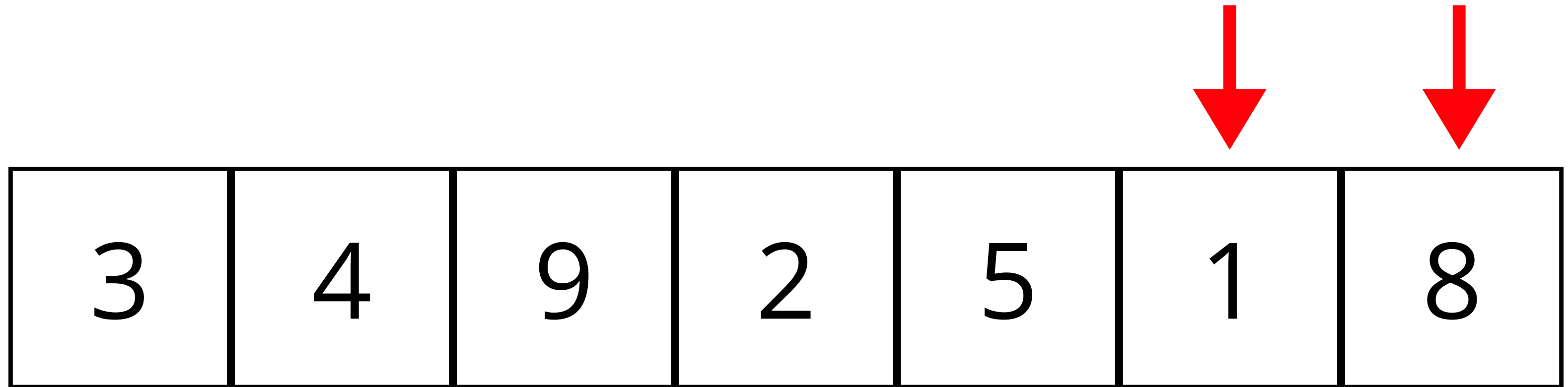


v[i] = 3
v[min] = 1
v[j] = 8

# Selection Sort



| 1 | 4 | 9 | 2 | 5 | 3 | 8 |
|---|---|---|---|---|---|---|

v[i]  ⟳  v[min]

# Selection Sort



$v[i] = 4$

$v[min] = 4$

$v[j] = 9$
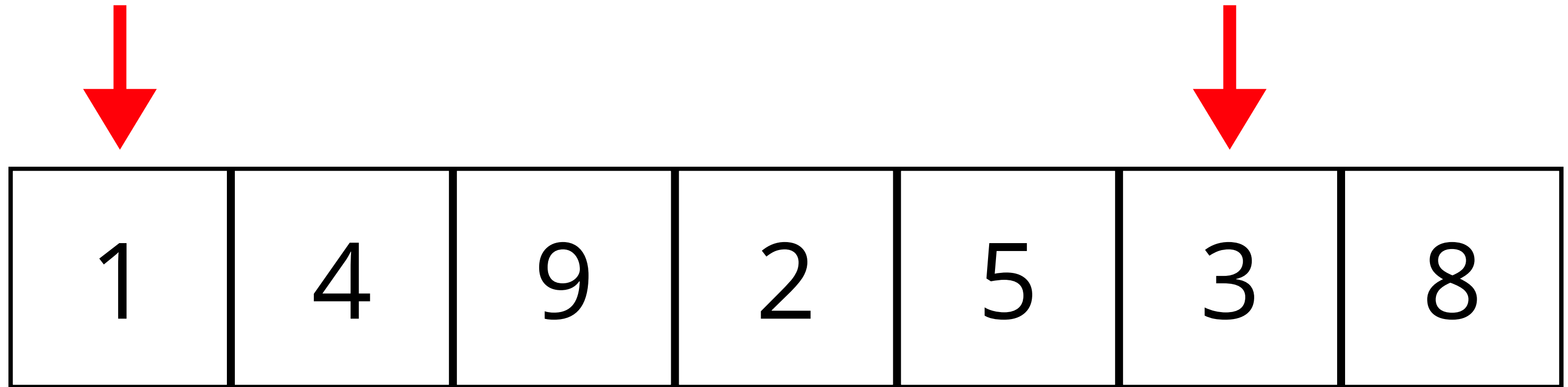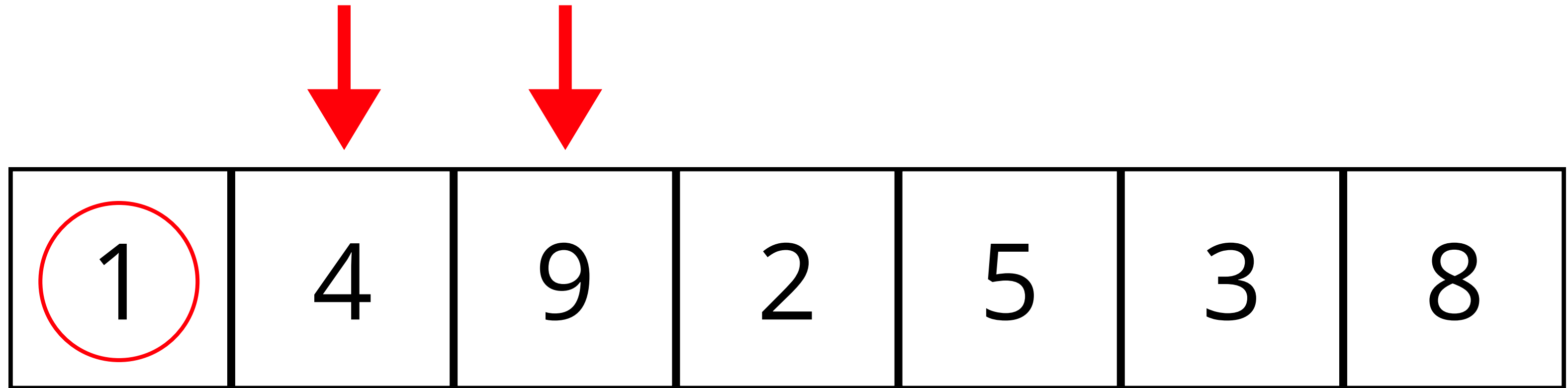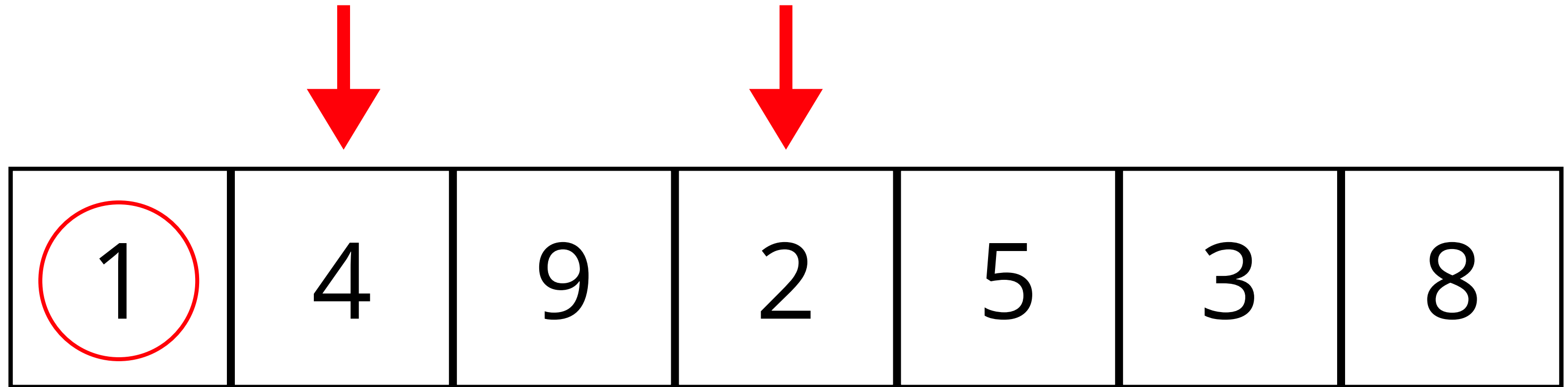
# Selection Sort



v[i] = 4
v[min] = 4
v[j] = 2

# Selection Sort

| 1 | 4 | 9 | 2 | 5 | 3 | 8 |

v[i] = 4

v[min] = 2

v[j] = 2

# Selection Sort



| 1 | 4 | 9 | 2 | 5 | 3 | 8 |
|---|---|---|---|---|---|---|
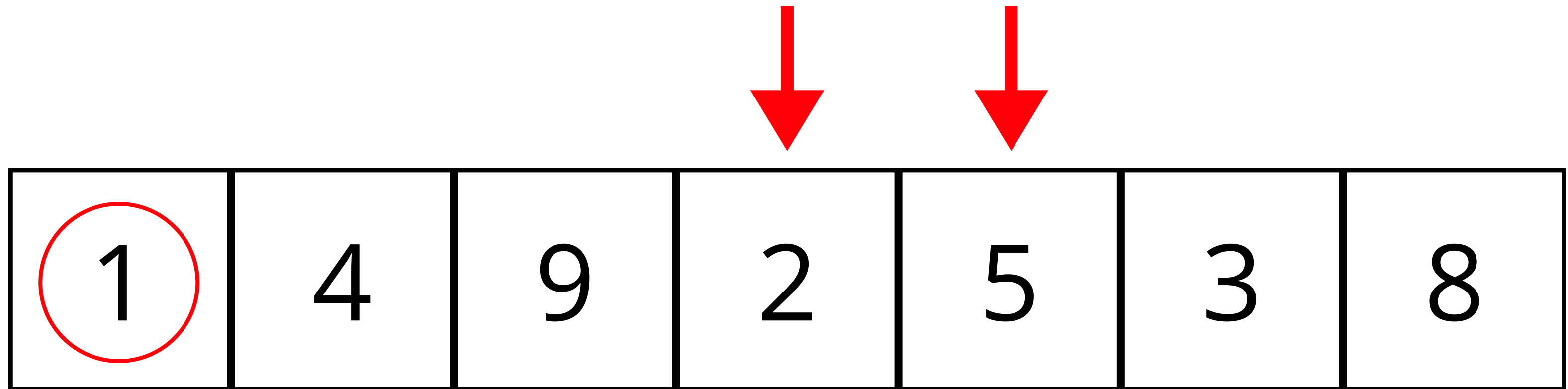
v[i] = 4

v[min] = 2

v[j] = 5

# Selection Sort
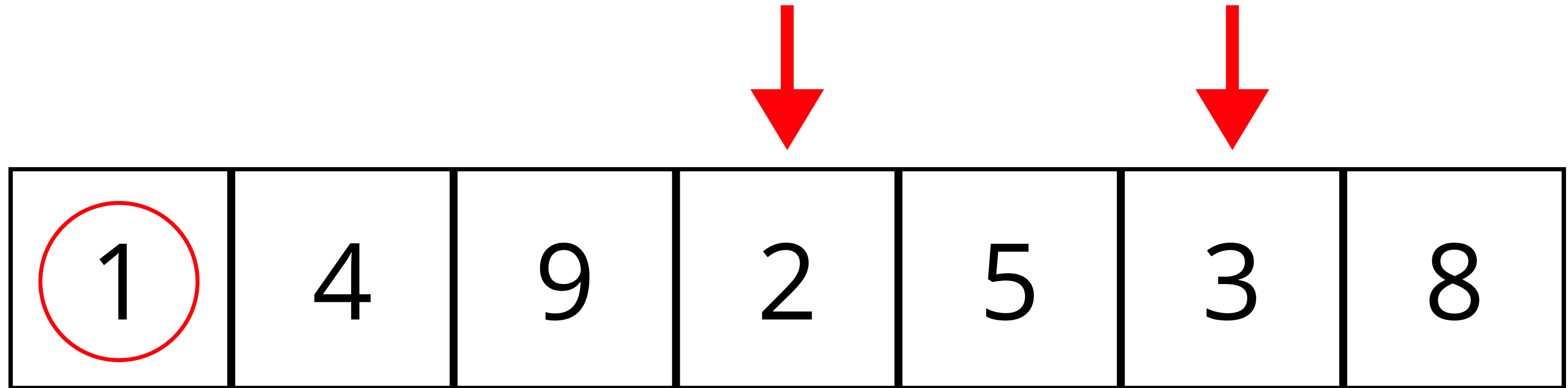


$$v[i] = 4$$
$$v[min] = 2$$
$$v[j] = 3$$

# Selection Sort

| 1 | 4 | 9 | 2 | 5 | 3 | 8 |
|---|---|---|---|---|---|---|
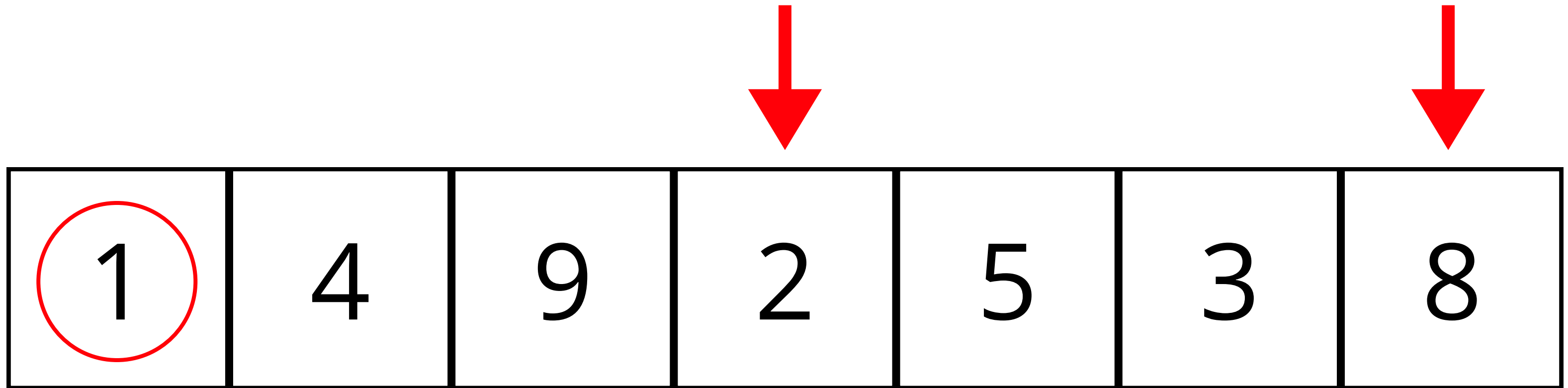
v[i] = 4

v[min] = 2

v[j] = 8

# Selection Sort



| 1 | 2 | 9 | 4 | 5 | 3 | 8 |

v[i] ⟳ v[min]
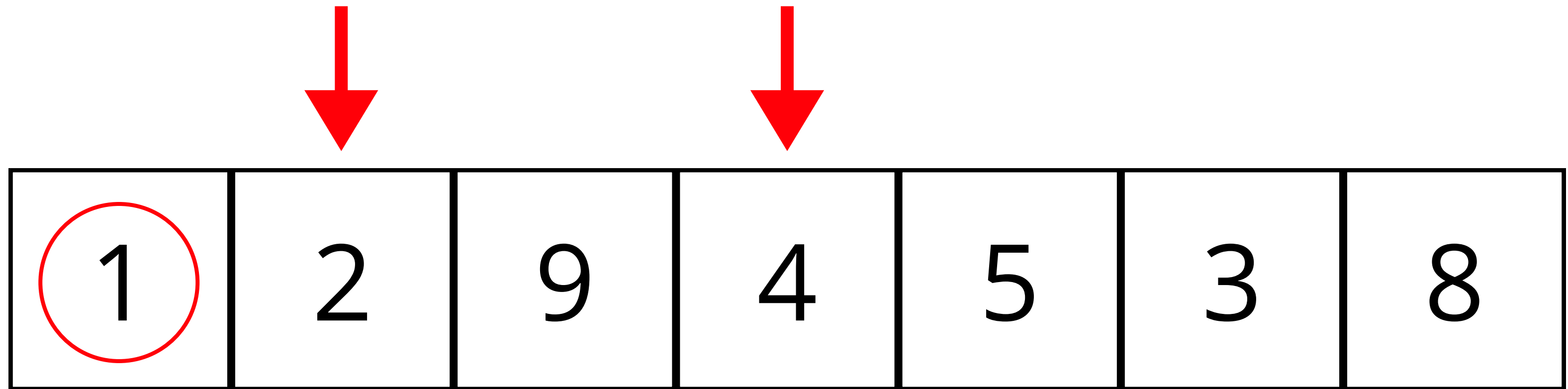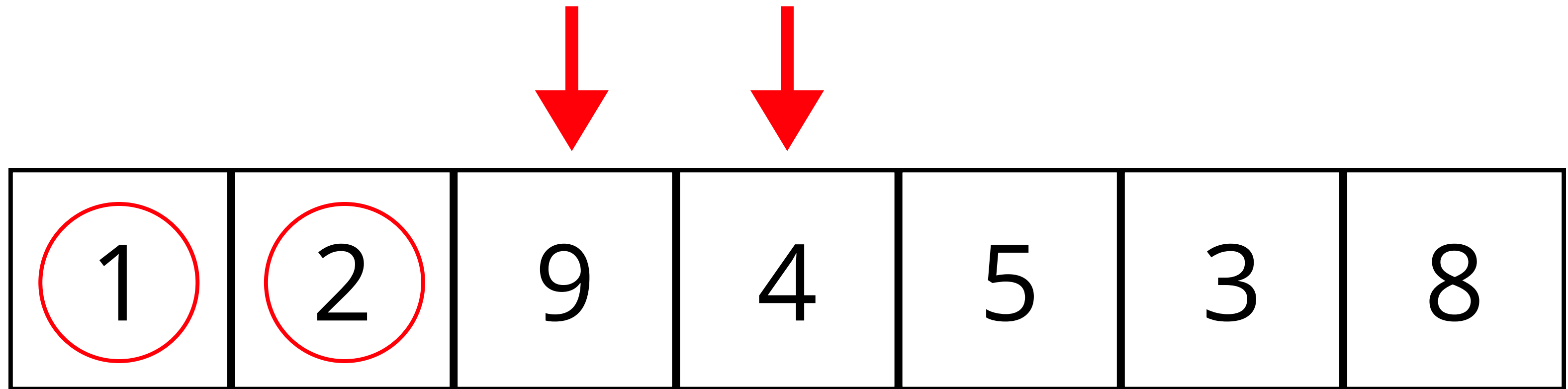
# Selection Sort



v[i] = 9

v[min] = 9

v[j] = 4

# Selection Sort



| 1 | 2 | 9 | 4 | 5 | 3 | 8 |

v[i] = 9
v[min] = 4
v[j] = 4

# Selection Sort
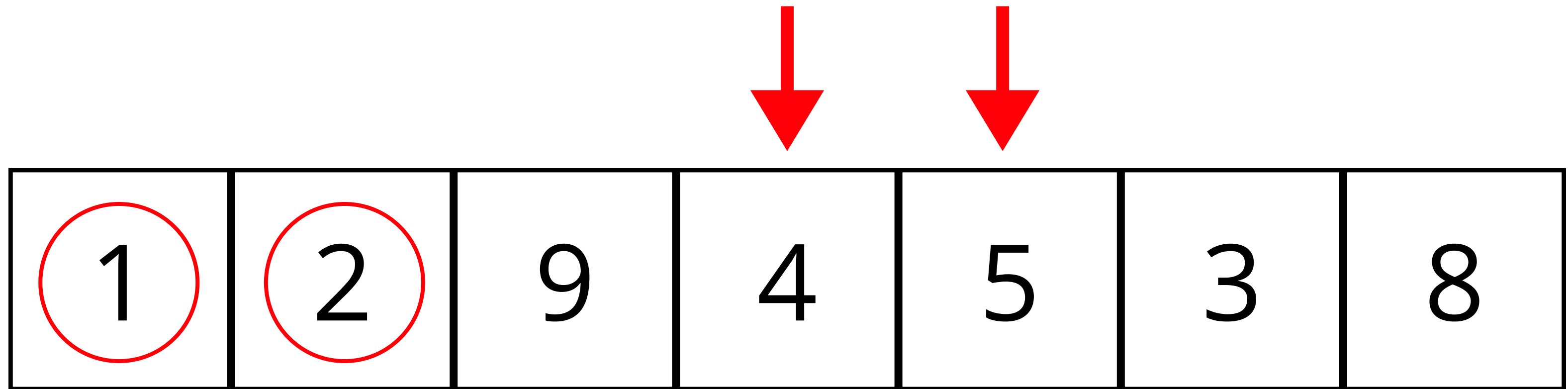


v[i] = 9
v[min] = 4
v[j] = 5

# Selection Sort
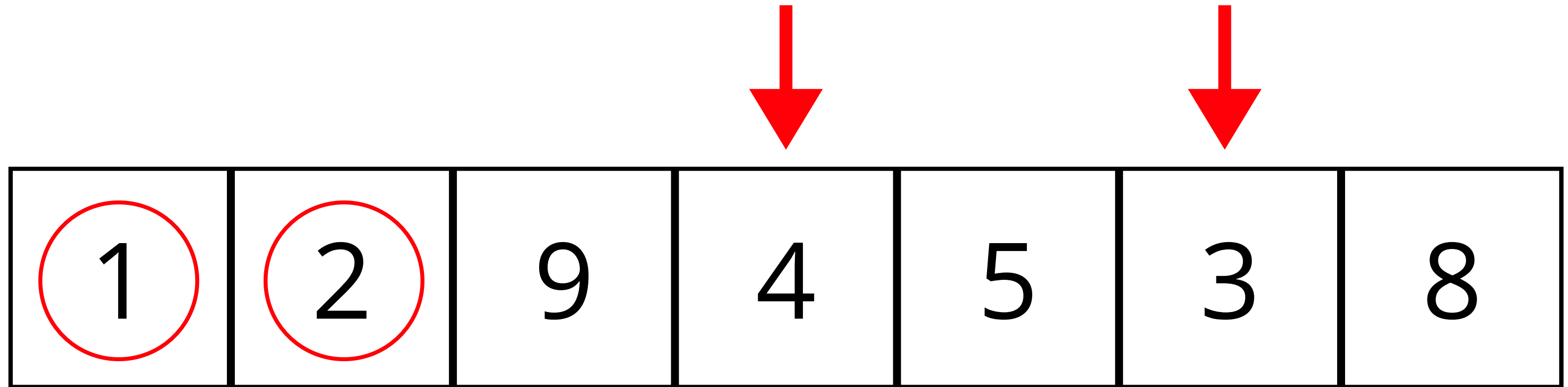


$v[i] = 9$
$v[min] = 2$
$v[j] = 3$
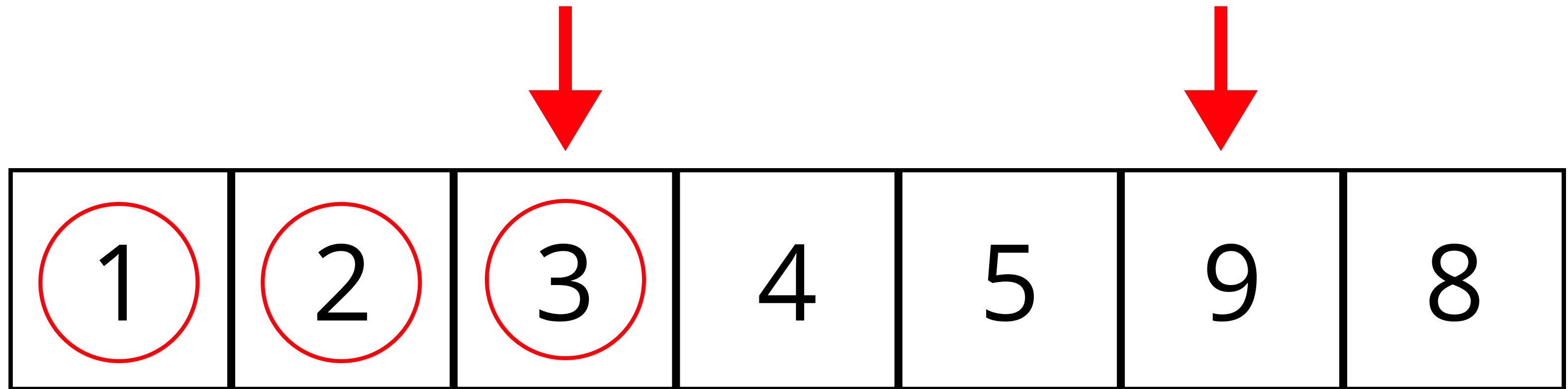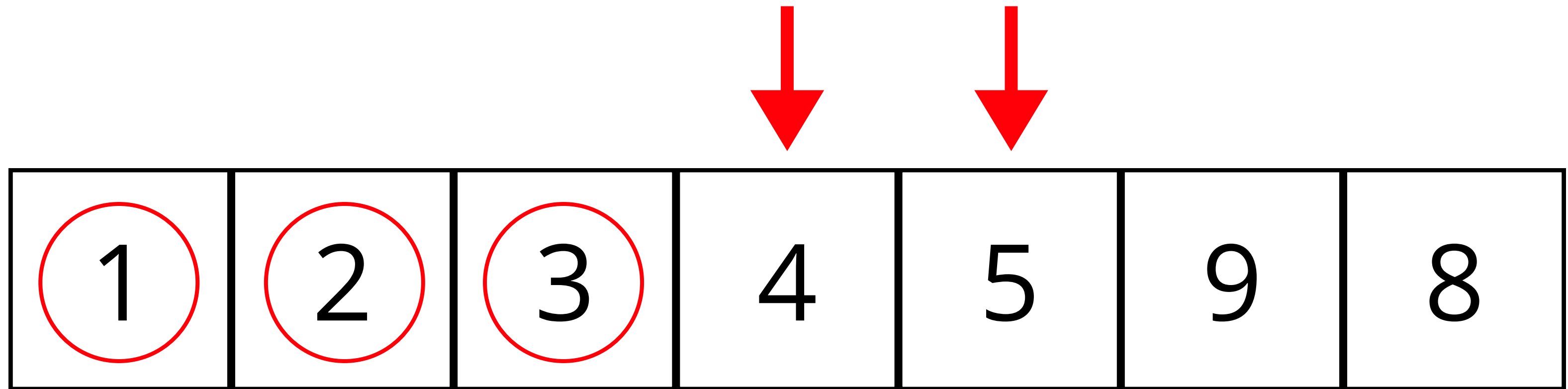
# Selection Sort



| 1 | 2 | 9 | 4 | 5 | 3 | 8 |
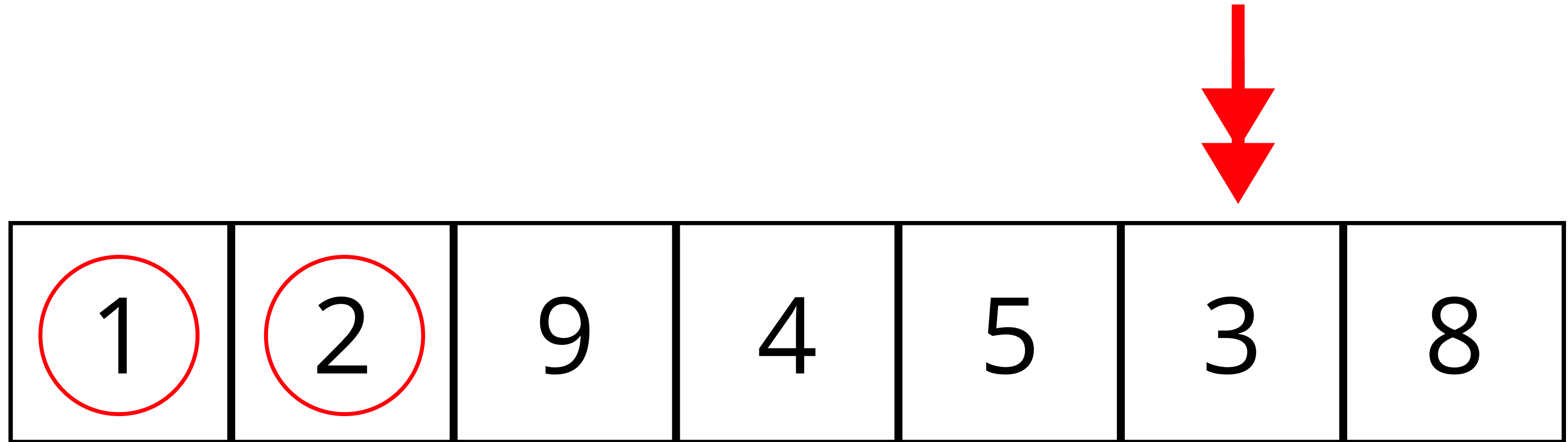
v[i] = 9

v[min] = 3

v[j] = 3

# Selection Sort
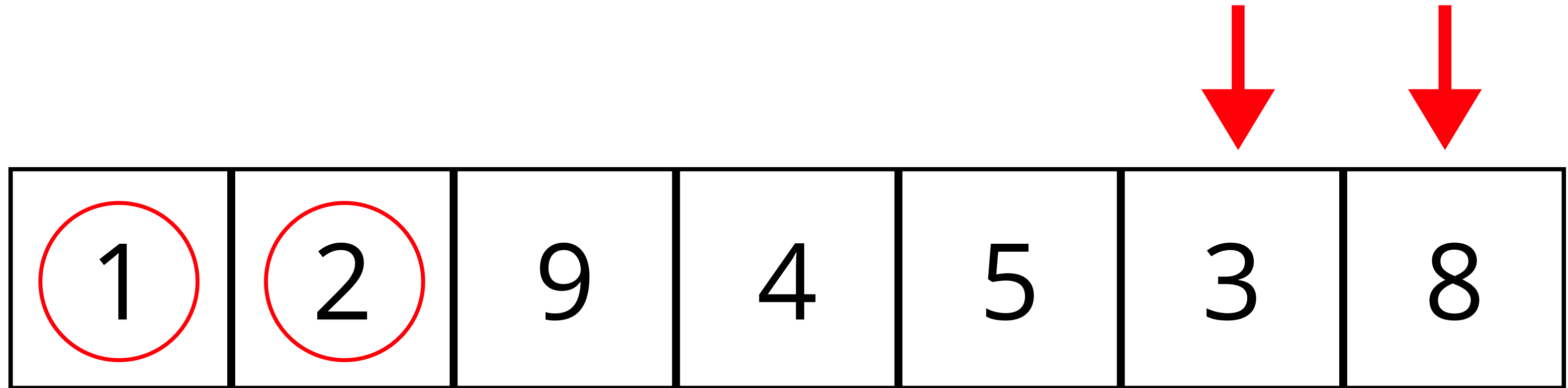


$$v[i] = 9$$
$$v[min] = 3$$
$$v[j] = 8$$

# Selection Sort

# Selection Sort



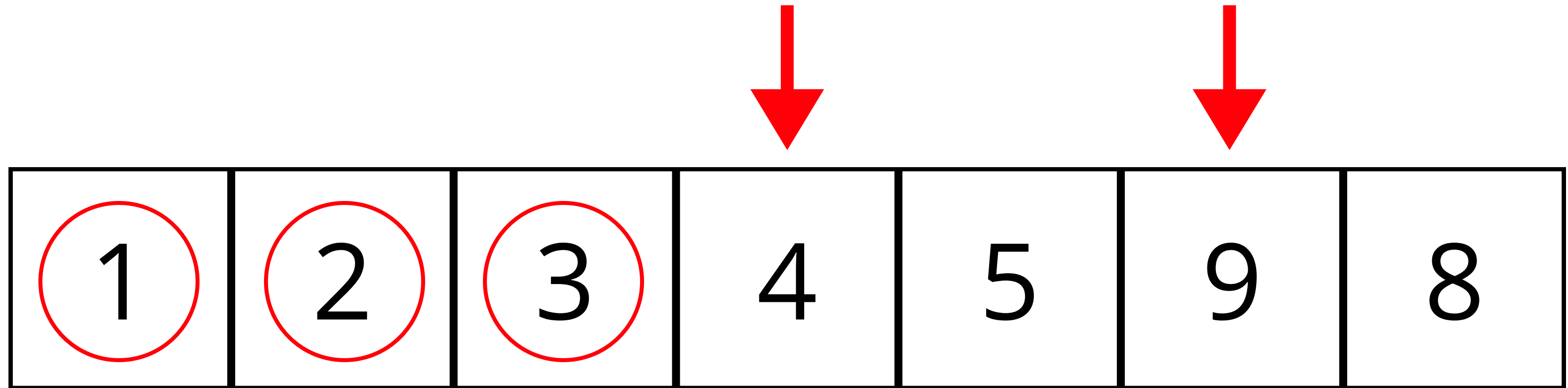| 1 | 2 | 3 | 4 | 5 | 9 | 8 |

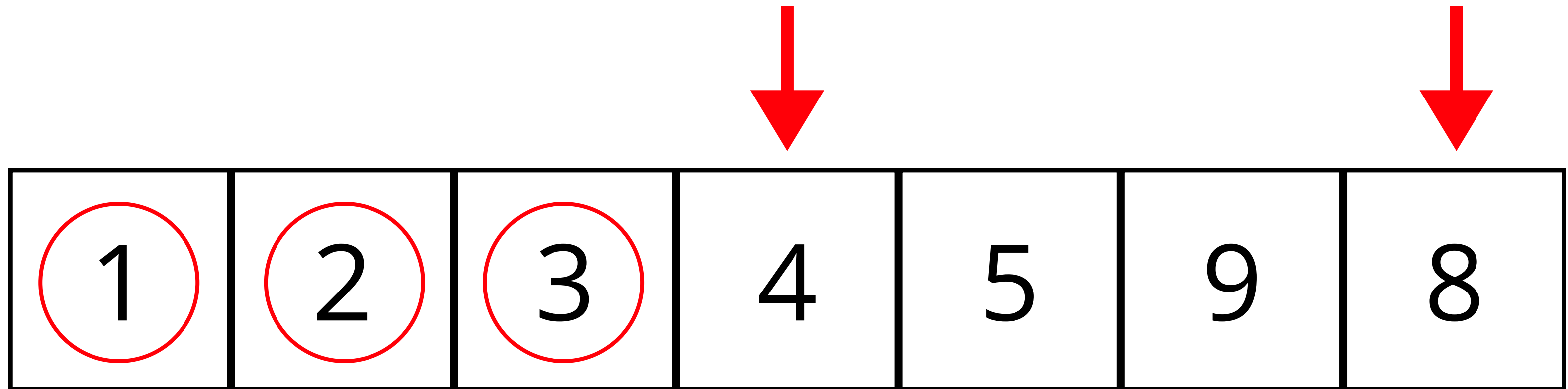v[i] = 4

v[min] = 4

v[j] = 5

# Selection Sort



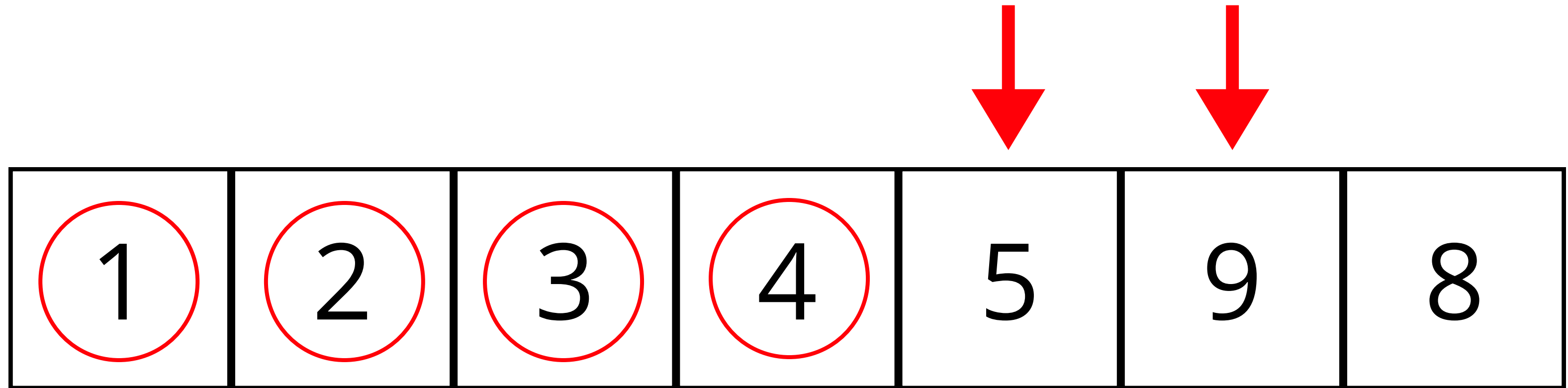$$v[i] = 4$$
$$v[min] = 4$$
$$v[j] = 9$$

# Selection Sort



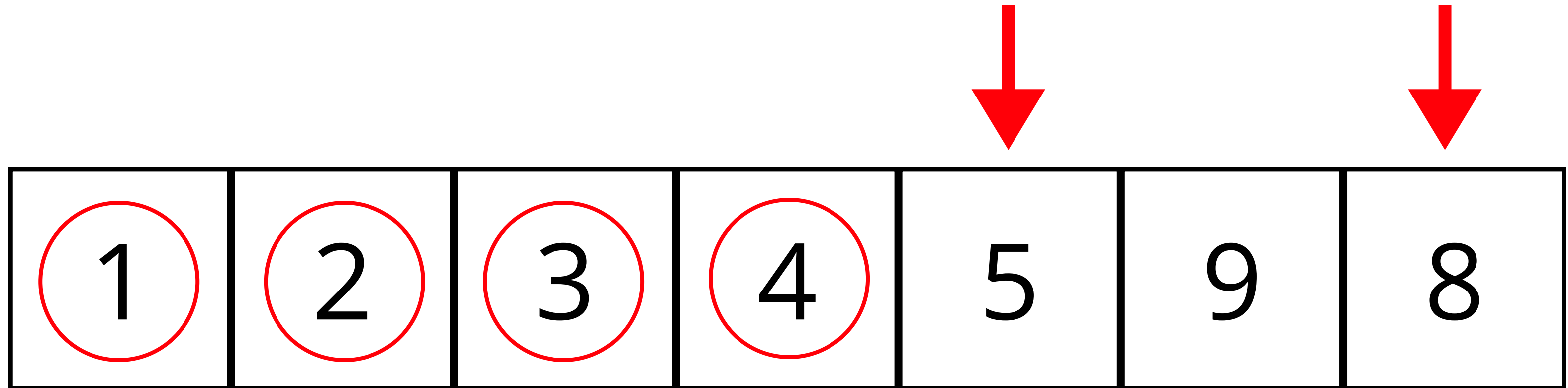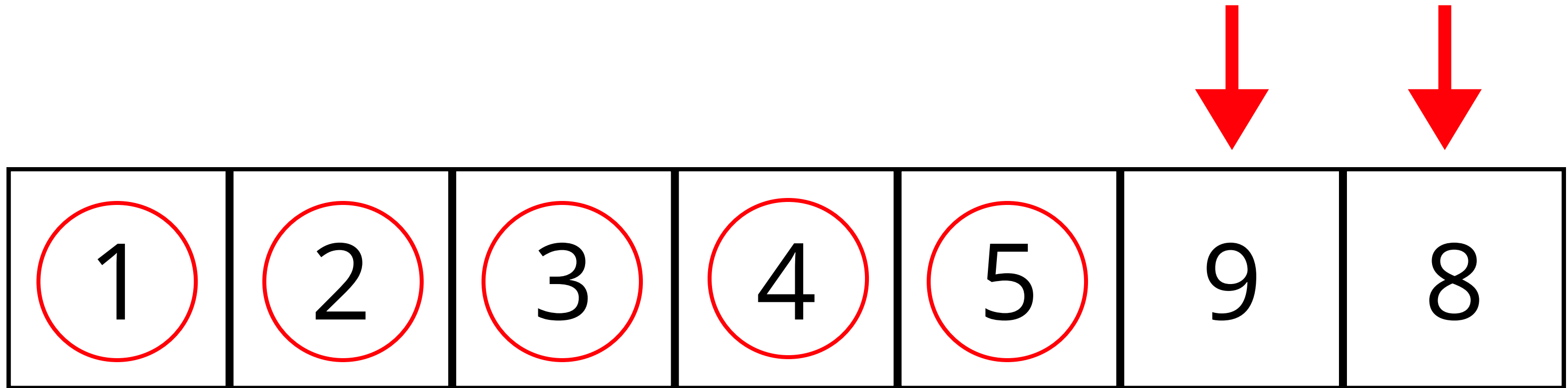v[i] = 4
v[min] = 4
v[j] = 8

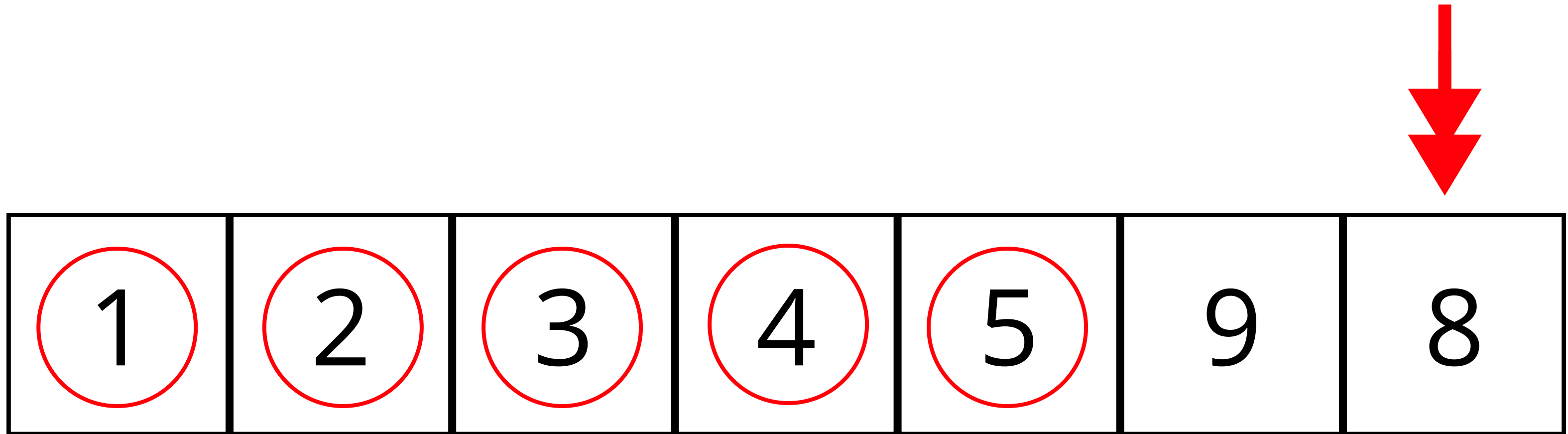# Selection Sort



v[i] = 5
v[min] = 5
v[j] = 9

# Selection Sort
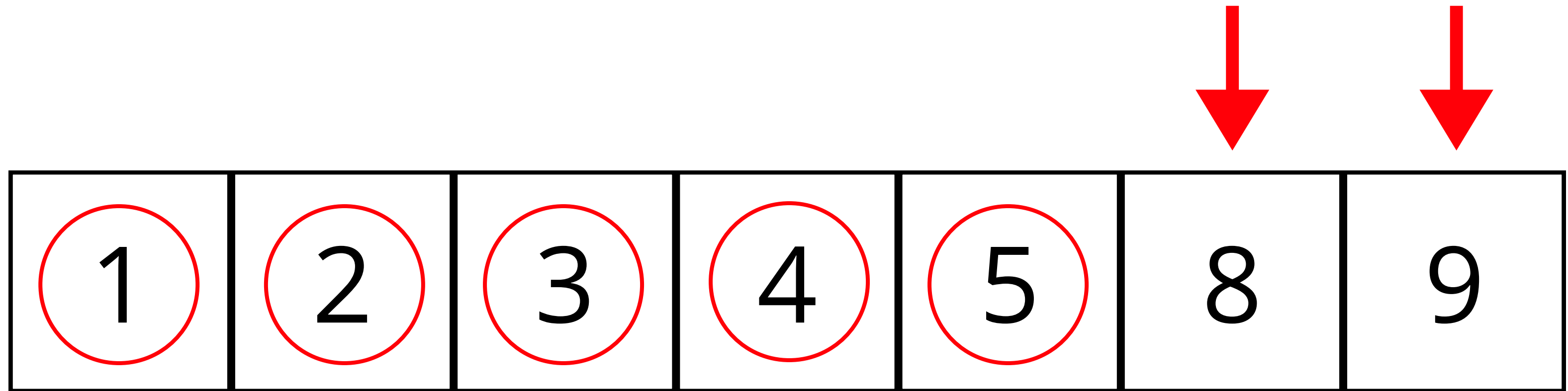


v[i] = 5
v[min] = 5
v[j] = 8

# Selection Sort



$$v[i] = 9$$
$$v[min] = 9$$
$$v[j] = 8$$

# Selection Sort



v[i] = 9

v[min] = 8

v[j] = 8

# Selection Sort

# Selection Sort

| 1 | 2 | 3 | 4 | 5 | 8 | 9 |
|---|---|---|---|---|---|---|